Appendix L *Location Hydraulic Study Form*

LOCATION HYDRAULIC STUDY FORM

Dist. ____ Co. ____ Rte. ____ K.P. ____
EA ____ Bridge No. ____
Floodplain Description:
____
____

1. Description of Proposal (include any physical barriers i.e. concrete barriers, soundwalls, etc. and design elements to minimize floodplain impacts)

____
____

2. ADT: Current ____ Projected ____

3. Hydraulic Data: Base Flood Q_{100}= ____ m^3 / s
WSE_{100}= ____ The flood of record, if greater than Q_{100}:
Q= ____ m^3 / s WSE= ____
Overtopping flood Q= ____ m^3 / s WSE= ____
Are NFIP maps and studies available? YES ____ NO ____

4. Is the highway location alternative within a regulatory floodway ?
YES ____ NO ____

5. Attach map with flood limits outlined showing all buildings or other improvements within the base floodplain.

Potential Q_{100} backwater damages:

A. Residences? NO ____ YES ____
B. Other Bldgs? NO ____ YES ____
C. Crops? NO ____ YES ____
D. Natural and beneficial
FLOODPLAIN VALUES? NO ____ YES ____

6. Type of Traffic:

A. Emergency supply or evacuation route? NO ____ YES ____
B. Emergency vehicle access? NO ____ YES ____
C. Practicable detour available? NO ____ YES ____
D. School bus or mail route? NO ____ YES ____

7. Estimated duration of traffic interruption for 100-year event hours: ____

8. Estimated value of Q_{100} flood damages (if any) – moderate risk level.

A. Roadway $_____ Encroachment not a significant
B Property $_____ " " " "
Total $_____ " " " "

9. Assessment of Level of Risk Low__X__
Moderate____
High_____

For High Risk projects, during design phase, additional Design Study Risk Analysis May be necessary to determine design alternative.

Signature – Dist. Hydraulic Engineer _____ Date 8/22/2007
(Item numbers 3,4,5,7,9)

Is there any longitudinal encroachment, significant encroachment, or any support of incompatible
Floodplain development? NO__X__ YES_____

If yes, provide evaluation and discussion of practicability of alternatives in accordance with 23 CFR 650.113

Information developed to comply with the Federal requirement for the Location Hydraulic Study shall be retained in the project files.

Signature – Dist. Project Engineer _____ Date 8/20/07
(Item numbers 1,2,6,8)

LOCATION HYDRAULIC STUDY FORM

Dist. ___ Co. ___ Rte. ___ K.P. ___
EA _____ Bridge No. ___
Floodplain Description:
___
___

1. Description of Proposal (include any physical barriers i.e. concrete barriers, soundwalls, etc. and design elements to minimize floodplain impacts)

___
___

2. ADT: Current ___ Projected ___

3. Hydraulic Data: Base Flood Q_{100}= ___ m^3 / s
WSE_{100}= ___ The flood of record, if greater than Q_{100}:
Q= ___ m^3 / s WSE= _____
Overtopping flood Q= ___ m^3 / s WSE= _____
Are NFIP maps and studies available? YES___X___ NO_____

4. Is the highway location alternative within a regulatory floodway ?
YES_____ NO___X___

5. Attach map with flood limits outlined showing all buildings or other improvements within the base floodplain.

Potential Q_{100} backwater damages:

A. Residences? NO___X___ YES_____
B. Other Bldgs? NO___X___ YES_____
C. Crops? NO___X___ YES_____
D. Natural and beneficial
FLOODPLAIN VALUES? NO___X___ YES_____

6. Type of Traffic:

A. Emergency supply or evacuation route? NO_____ YES___X___ Information not available
B. Emergency vehicle access? NO_____ YES___X___
C. Practicable detour available? NO_____ YES_____
D. School bus or mail route? NO_____ YES___X___

7. Estimated duration of traffic interruption for 100-year event hours:___0___

8. Estimated value of Q_{100} flood damages (if any) -- moderate risk level.

A. Roadway $_____ Information not available
B Property $_____ " " "
Total $_____ " " "

9. Assessment of Level of Risk Low__X__
Moderate____
High_____

For High Risk projects, during design phase, additional Design Study Risk Analysis May be necessary to determine design alternative.

Signature – Dist. Hydraulic Engineer _____ Date 9/28/2007
(Item numbers 3,4,5,7,9)

Is there any longitudinal encroachment, significant encroachment, or any support of incompatible
Floodplain development? NO__X__YES_____

If yes, provide evaluation and discussion of practicability of alternatives in accordance with 23 CFR 650.113

Information developed to comply with the Federal requirement for the Location Hydraulic Study shall be retained in the project files.

Signature – Dist. Project Engineer _____ Date 9/28/07
(Item numbers 1,2,6,8)

LOCATION HYDRAULIC STUDY FORM

Dist. [illegible] Co. [illegible] Rte. 101 K.P. [illegible]
EA [illegible] Bridge No. [illegible]
Floodplain Description:
[illegible] Russian River at State Route 101
[illegible]

1. Description of Proposal (include any physical barriers i.e. concrete barriers, soundwalls, etc. and design elements to minimize floodplain impacts)

[illegible] floodplain.

2. ADT: Current [illegible] Projected [illegible]

3. Hydraulic Data: Base Flood Q_{100}= [illegible] m^3 / s
WSE_{100} = [illegible] The flood of record, if greater than Q_{100}:
Q= [illegible] m^3 / s WSE= _____
Overtopping flood Q= [illegible] m^3 / s WSE= _____
Are NFIP maps and studies available? YES X NO_____

4. Is the highway location alternative within a regulatory floodway ?
YES_____ NO X

5. Attach map with flood limits outlined showing all buildings or other improvements within the base floodplain.

Potential Q_{100} backwater damages:

A. Residences? NO X YES_____
B. Other Bldgs? NO X YES_____
C. Crops? NO X YES_____
D. Natural and beneficial
FLOODPLAIN VALUES? NO X YES_____

6. Type of Traffic:

A. Emergency supply or evacuation route? NO_____ YES X Information not available
B. Emergency vehicle access? NO_____ YES X
C. Practicable detour available? NO_____ YES [illegible]
D. School bus or mail route? NO_____ YES X

7. Estimated duration of traffic interruption for 100-year event hours: C

8. Estimated value of Q_{100} flood damages (if any) – moderate risk level.

A. Roadway $_____ Information not available
B Property $_____ " " "
Total $_____ " " "

9. Assessment of Level of Risk Low__X__
Moderate____
High____

For High Risk projects, during design phase, additional Design Study Risk Analysis May be necessary to determine design alternative.

Signature – Dist. Hydraulic Engineer_____ Date 8/29/2007
(Item numbers 3,4,5,7,9)

Is there any longitudinal encroachment, significant encroachment, or any support of incompatible
Floodplain development? NO__X__YES_____

If yes, provide evaluation and discussion of practicability of alternatives in accordance with 23 CFR 650.113

Information developed to comply with the Federal requirement for the Location Hydraulic Study shall be retained in the project files.

Signature – Dist. Project Engineer_____ Date 8/30/07
(Item numbers 1,2,6,8)